

# UNIVERSITY OF OUM EL BOUAGHI

Report on the United Nations
Sustainable Development Goal 14:
Life Below Water

# **ABSTRACT**

This report sheds light on the University of Oum El Bouaghi's initiatives aimed at achieving SDG 14: Life Below Water.



#### Introduction

Sustainable Development Goal 14 (SDG 14), *Life Below Water*, aims to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Although Algeria is not a maritime university by geography, the University of Oum El Bouaghi plays an active role in promoting aquatic sustainability through its educational programs, research initiatives, community outreach, and partnerships. The university focuses on freshwater ecosystems, sustainable fisheries management, environmental protection, and the preservation of biodiversity in aquatic and related ecosystems.

#### 14.2 Educational and Awareness Programs

# 1. Educational Programs on Freshwater Ecosystems

The **University of Oum El Bouaghi** offers specialized academic programs focused on freshwater systems, including **limnic and lotic aquatic ecosystems**. These programs aim to enhance awareness and build capacity among stakeholders in water resource management, agricultural sectors, and the national water resources agency.

- Bachelor's in Hydrology focuses on water resource management, irrigation practices, and water conservation strategies.
   Program link
- Master's in Urban Hydrology deepens technical knowledge on sustainable management of urban water systems.
   Program link

These programs contribute to local and national capacity building by preparing professionals who can apply sustainable practices in water management and conservation across Algeria.

# 2. University-Led Education and Awareness Programs on Sustainable Fisheries and Aquaculture Management

The university promotes **education on sustainable fisheries and aquaculture** through multidisciplinary programs that integrate marine ecology, biodiversity, and environmental management. Although there is no exclusive degree in fisheries, related programs provide essential ecological foundations:

- Licence in Ecology and Environment
- Master in Biodiversity and Environment
- Master in Ecology of Natural Environments

These programs emphasize sustainability in natural resource use, offering valuable insights for the management of fisheries and aquaculture. Program links available on the Faculty of Natural and Life Sciences website.

# 3. University Initiatives on Raising Awareness about Overfishing and Destructive Fishing Practices

The University of Oum El Bouaghi raises awareness about overfishing and illegal, unreported, and unregulated (IUU) fishing through community outreach and research-driven education.

Functional Ecology & Environment Laboratory – studies the ecological impact
of overfishing and conducts seminars and workshops on sustainable aquatic
practices.

LEFE Laboratory link

Sustainable Development and Environmental Protection Laboratory –
promotes sustainable development and campaigns to prevent destructive
fishing practices.

LDDPE Laboratory link

## 14.3 Supporting Aquatic Ecosystems through Action

# 4. University Initiatives for Promoting Conservation and Sustainable Use of Aquatic Resources

The university supports conservation through **field trips, symposia, and collaborative events**:

- Field Trip to Ourkis Dam (World Wetlands Day 2023)
  Organized in partnership with the Directorate of Environment, this event engaged students, authorities, and school children in biodiversity education and a tree-planting campaign.
- Geological Sciences Symposium on "Earth Resource Origins and Environmental Impacts"
   Brought together experts and policymakers to discuss sustainable resource use and environmental impacts.

# 5. Campus Policy on Sustainable Sourcing of Aquatic Food Products

The University of Oum El Bouaghi aligns with **national and international sustainability frameworks** for food sourcing from aquatic ecosystems. Relevant frameworks include:

- IUCN Framework Agreement for Biodiversity Conservation in Algeria
- Environmental Protection Law (Loi n°83-03)

# National reports on sustainable aquaculture and fisheries management

These guidelines ensure responsible sourcing of seafood and awareness campaigns about sustainable consumption.

# 6. University Efforts in Preserving and Enhancing Threatened Ecosystems and Biodiversity

The university actively collaborates with:

- Directorate of Environment Oum El Bouaghi
- Forest Conservation Department Oum El Bouaghi

Joint projects focus on biodiversity monitoring, research on endangered ecosystems, and promoting sustainable forest management.

## 7. Research Collaboration on Reducing Damage to Aquatic Ecosystems

Research projects address the **preservation of forest and aquatic ecosystems** in Eastern Algeria. Initiatives include pollution control studies and methods to improve ecosystem resilience.

#### 14.4 Water-Sensitive Waste Disposal

## 8. University Water Quality Standards for Discharges and Ecosystem Protection

The university adheres to **national water quality laws and decrees** to ensure safe water management and protect wildlife and human health. Key legislative references include:

- Executive Decree No. 11-125 (2011) on water quality for human consumption.
- Law No. 05-12 (2005) permits the use of treated wastewater for irrigation.
- Executive Decree No. 10-23 (2010) sets specifications for wastewater treatment systems. (For a full list, see Ministry of Hydraulics: mh.gov.dz)

# 9. University Action Plan for Reducing Plastic Waste on Campus

Policy created (2010), reviewed (2024) The university's Plastic Reduction Policy promotes:

- Compliance with national environmental laws
- Awareness programs on plastic hazards
- Substitution with eco-friendly materials
- Waste reduction and recycling initiatives

Partnerships include the **Ministry of Environment**, **National Waste Agency**, and **APOCE**.

National Waste Agency - Plastic Regulations

## 10. University Policy on Preventing and Reducing Land-Based Marine Pollution

The university enforces a **comprehensive environmental policy** to combat marine pollution originating from land-based activities. It promotes waste reduction, research on marine pollution, and partnerships with local authorities. Reference: Algerian Littoral Law – Loi 02-02

# 14.5 Preservation of the Local Ecosystem

#### 11. University Plan to Minimize Alterations in Aquatic Ecosystems

The university implements **environmental education**, **research**, **and eco-campus initiatives** in line with:

- Law No. 83-03 (Environmental Protection)
- Law No. 2002-02 (Coastal Preservation)

Actions include seminars, waste reduction, coastal monitoring, and research on sustainable development.

# 12. University Monitoring of Aquatic Ecosystem Health

Through its environmental and ecological departments, the university monitors:

- Water quality and biodiversity
- Pollution levels and ecological balance
- Partnership with the Directorate of Health and Hospital Reform

Findings contribute to environmental planning and community education.

#### 13. University Programs Supporting Aquatic Stewardship Practices

The university supports **national research competitions and programs** promoting water sustainability:

- National Competition for Best Research Project on Water
- Participation in National Research Programs under Executive Decree No. 21-89 (2021) focusing on:
  - Aquaculture Development
  - Water Quality and Conservation
  - Marine Fisheries Dynamics

#### o Natural Resource Protection

# 14. University-Community Partnerships for Aquatic Ecosystem Preservation

Formal agreements with the Directorate of Agricultural Interests and the Directorate of Environment enable cooperative actions for local aquatic ecosystem protection and sustainable practices.

### 15. Aquatic Park Management Strategy

While the University of Oum El Bouaghi has not yet established a designated **aquatic park**, its educational and environmental initiatives form the foundation for future management strategies that integrate **local aquatic biodiversity**, conservation, and environmental education.

#### Conclusion

The University of Oum El Bouaghi demonstrates a robust commitment to **SDG 14**: **Life Below Water** through integrated educational programs, scientific research, policy alignment, and community engagement. By combining academic rigor with environmental action, the university contributes meaningfully to the sustainable management of Algeria's freshwater and aquatic ecosystems, reinforcing national and global sustainability goals.